U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Princeton Recycles - Removal Polrep

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region II

Subject: **POLREP #4**
Princeton Recycles
A25K
Princeton, NJ

To:
From: David Rosoff/Cris D'Onofrio, OSC
Date: 1/22/2016
Reporting Period: 11/25/15 - 1/22/2016

1. Introduction

1.1 Background

Site Number:	A25K	**Contract Number:**	EPS21502
D.O. Number:	0014	**Action Memo Date:**	12/23/2015
Response Authority:	CERCLA	**Response Type:**	Time-Critical
Response Lead:	EPA	**Incident Category:**	Removal Action
NPL Status:	Non NPL	**Operable Unit:**	
Mobilization Date:	8/31/2015	**Start Date:**	8/31/2015
Demob Date:		**Completion Date:**	
CERCLIS ID:	NJR000048397	**RCRIS ID:**	
ERNS No.:		**State Notification:**	07/22/2015
FPN#:		**Reimbursable Account #:**	

1.1.1 Incident Category

Soil contamination associated with metal recycling

1.1.2 Site Description

The Site is a former paper and metal recycling business located on Basin Street in Princeton, New Jersey. The recycling business began operations in 1955 and ceased operations in 2003. Allegedly operations at the facility included draining PCB transformers and the burning of wire casings. In 2014 and 2015 NJDEP performed extensive sampling of the surface and subsurface soil on the Site and determined the extent of PCB, lead, SVOC and dioxin contamination. Levels of all of these contaminants exceed the RMLs in Site soils. PCB concentrations (mainly Aroclor 1260) were found as high as 2,800 parts per million (ppm) in surface soils. Lead concentrations were detected as high as 11,300 ppm. Benzo(a)pyrene and dioxin were detected as high as 17 ppm and 1.3 parts per billion (ppb), respectively.

The Site is located in a residential neighborhood and is directly adjacent to a tributary to the Stoney Creek. The Site property is unsecured and accessible to trespassers. The results from the NJDEP sampling indicate there has been a release of CERCLA designated hazardous substances at the Site, which is a facility under Section 101(9) of CERCLA. Based on the available information, a CERCLA removal action is warranted at the Site. An Action memorandum signed by the Region 2 ERRD Director on August 10, 2015 authorized funding for the excavation and off-site disposal of approximately 7,500 tons of contaminated soil.

1.1.2.1 Location

The Site is located at 409 Basin Street in Princeton, New Jersey (Block 11503, Lots 2 & 8). Lot 2 is 0.27 acres in size and contains a dwelling and lot 8 is 0.37 acres in size and is undeveloped. The Site also includes adjacent parcels that have been impacted by the spread of contamination including 403 Basin Street (Block 11503, Lot 1), 413 Basin Street (Block 11503, Lot 3), 417 Basin Street (Block 11503, Lot 7) and multiple Lots in Block 11301. The Site is in a residential neighborhood bordered by lands owned by Princeton University. Residences are located immediately to the south along Basin Street. A Princeton University apartment complex is located within 200 feet to the west of the Site. A tributary to Stoney Creek flows from west to east along the north boundary of the Site.

The Site is located at 40° 19’ 59.44” (latitude) / -74° 39’ 19.6” (longitude).

1.1.2.2 Description of Threat

Analytical data generated from NJDEP soil sampling events in 2014 and 2015 found the above hazardous

substances at concentrations well above the EPA RMLs. Elevated concentrations of these contaminants were found in surface soils (0-6 inches BGS) and down to five feet BGS. It is estimated that approximately 7,500 tons of soil will need to be removed from the Site to address the release of hazardous substances.

It is believed that the mechanism for past releases on the Site include improper management of transformer waste oils (PCBs), burning of wire and debris (dioxin and benzo(a)pyrene) and uncontrolled storage of metallic wastes (lead). The threat of future releases from the Site exists through the spread of soil contamination through surface water run-off, windblown dust and/or human tracking.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

Beginning in 2014, NJDEP performed extensive soil sampling at the Site to delineate the extent of contamination. As of June 2015, NJDEP had performed four iterative rounds of soil sampling at the Site. Surface soil (0 – 6") was sampled within the main Site property in May 2014. Forty-six samples were collected. With the exception of two samples, all results showed elevated levels of PCBs, lead and/or benzo(a)pyrene above NJDEP's residential standards.

A second round of delineation samples were collected by NJDEP in August 2014. The original 46 sample locations were expanded to eighty-three locations; both deep samples within the Site where contamination had been detected and surface samples along the outer perimeter of the Site. The results indicated deeper contamination (18''– 24") in some areas. There was additional horizontal contamination above acceptable levels to the north, west and east of the main Site property. In addition to the PCB, metals, and SVOCs analyses, the second round included dioxin samples from where an open burn pit was thought to have been located. Dioxin results were as high as 1.3 ppb in this area.

In December 2014 and June 2015, a third and fourth round of samples were collected to complete the delineation of the horizontal extent of the surface contamination and to delineate the extent of vertical contamination in the sample points that had not reached an uncontaminated zone. Additional dioxin samples were also secured.

Overall the sample results indicate that the soil throughout the Site is contaminated with PCBs, lead, and benzo(a)pyrene above both NJDEP residential and non-residential standards and EPA RMLs. Dioxin is found above the NJDEP Action Level in several "burn pit' locations on the Site.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

Excavation and site restoration operations continued throughout this reporting period. Over 90% of the originally planned excavation area has been excavated and backfilled with clean certified fill to date. A small portion of the originally planned excavation area containing approximately 800 cubic yards of contaminated soil remains to be excavated in the northeast corner of the site. A total of 59 truckloads of non-TSCA designated soil have been shipped this week for disposal to the Gloucester County Solid Waste landfill in Swedesboro, NJ, to complete the load out of all previously staged contaminated soils. A total of 4,400 tons of non-TSCA contaminated soil have been shipped to the Swedesboro landfill to date. A total of 5,025 tons of TSCA characterized soil has been excavated and shipped for disposal to the Wayne Disposal Inc. landfill in Belleville, MI to date.

Last week the residence at 413 Basin Street was connected to the city sewer system in preparation for excavating contaminated soil in the back of the home. The sewer connection was needed in order to avoid interruption of sewer service during excavation activities that were expected to impact the existing septic system. Upon completion of the sewer line connection, the septic tank was pumped out, the tank was removed and the excavation of contaminated soil along the southwestern side of this residence was completed.

Site restoration activities continue to be conducted simultaneously with excavation operations. Backfill and topsoil installation have been completed at the 413 and 417 Basin Street residences. The fence along the backyard boundary between the two residences has been reinstalled. Four holly trees have also been replaced along the northwestern corner of the 417 Basin Street property. Additionally, the Princeton University fence along Lawrence Drive has been reinstalled and restored to original condition. Clean certified backfill restoration is approximately 90% complete to date on a site-wide basis. Top soil restoration is approximately 75% complete to date. Clean certified backfill and topsoil are being provided by EME, Inc. in New Egypt, New Jersey. All analytical results for the EME fill and topsoil have met the NJDEP clean fill certification requirements.

Analytical results from the stream assessment conducted in and adjacent to the Alexander Creek flood plain have been received. The results indicated an area of PCB contamination along the northeastern site boundary that will likely require remediation. The RST contractor collected a second round of samples today in order to refine the contaminant delineation in this area. The results from today's sampling are expected within a week and will be used to finalize the excavation cut lines required to remediate the area. An estimate of the total contaminated soil quantity will be provided once analytical results are received and the cut-lines can be finalized. The NJDEP and the property owner, Princeton University, have been notified of the findings; EPA will ensure concurrence on the proposed remediation plan from both parties prior to conducting removal activities in this area. EPA/RST have also conducted a tree inventory in this new area of impact for use in development of the restoration plan.

A Community Air Monitoring Plan (CAMP) has been developed for this site. Continuous real-time air monitoring for total dust particulates is being conducted on a daily basis as per the Plan. A site action level of 150 micrograms per cubic meter (ug/m^3) has been established as an 8 hour time-weighted average. No exceedances have been experienced to date. Additionally, periodic air sampling is being performed in

conjunction with the continuous air monitoring. Air samples have been collected for PCB, lead and benzo(a)pyrene analyses to confirm real-time air monitoring results. Air sampling results indicate that all contaminants remain below method detection levels for all samples collected to date.

2.1.2 Response Actions to Date

The following response actions have been implemented to date:

- Developed a site health and safety plan, quality assurance project plan, and community air monitoring plan.
- Mobilized an Emergency and Rapid Response Services (ERRS) contractor to establish support zones, contaminant reduction zones, and exclusion zones. Initial work included marking out underground utilities and establishing excavation and staging areas.
- Established engineering controls to assure proper management of excavated materials (*i.e.* dust suppression, lined soil staging area, erosion and sedimentation control).
- Conducting air monitoring in order to monitor proper site management of excavated soil and protection of site workers and community members in close proximity to the site.
- Excavated and stockpiled approximately 9,425 tons of contaminated soil (a TSCA pile and a ID-27 pile).
- Transported 5,025 tons of TSCA regulated soil to Wayne Disposal, Inc. in Belleville Michigan.
- Transported 4,400 tons of PCB contaminated soil characterized as non-TSCA, industrial solid waste to the Gloucester County Solid Waste Landfill in Swedesboro, NJ.
- Determined acceptable local backfill sources. Backfilling of the excavation has been performed as digging progressed.
- Completed an off-site assessment of the Alexander Creek floodplain and adjacent areas located north and northeast of the Site.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)
EPA is conducting PRP search activities including interviews and the preparation of 104e and notice of liability letters.

2.1.4 Progress Metrics

Waste Stream	***Medium***	***Quantity***	***Manifest #***	***Treatment***	***Disposal***
TSCA	Soil	5,025 tons		Landfill	Wayne Disposal Inc., Belleville, MI
Non-TSCA	Soil	4,400 tons		Landfill	Gloucester Co. Landfill, Swedesboro, NJ

2.2 Planning Section

2.2.1 Anticipated Activities

- Excavation and backfilling activities will continue on 1/25/2016 weather permitting.
- Tree removal and excavation in the newly delineated contamination area adjacent the Alexander Creek floodplain located along the northeast border of the Site; upon NJDEP and property owner concurrence on the proposed remediation plan.
- EPA is developing a tree replanting and site restoration plan based on recommendations from a certified tree expert.

2.2.1.1 Planned Response Activities

- Continue contaminated soil excavation, transportation and disposal.
- Continue backfilling operations with certified clean fill in completed excavation areas.
- Continue air monitoring and air sampling per the Community Air Monitoring Plan.
- Site restoration including establishing final grades with certified clean top soil, tree planting, grass/sod installation and re-establishing of natural areas.

2.2.1.2 Next Steps

- Seek concurrence on the proposed excavation plan for the area adjacent the Alexander Creek floodplain.
- Tree removal in the impacted area adjacent the Alexander Creek upon NJDEP/property owner concurrence.
- Excavation of PCB contaminated soil in the recently delineated area adjacent the Alexander Creek.

2.2.2 Issues

- EPA has identified a new area of PCB contaminated soil that is located along the northeastern site boundary. The contamination borders and extends into the Alexander Creek floodplain and is in the process of being fully delineated. A proposed remediation plan has been submitted to the NJDEP and the property owner for concurrence.

2.3 Logistics Section

No information available at this time.

2.4 Finance Section

No information available at this time.

2.5 Other Command Staff

2.5.1 Safety Officer

No safety issues to date.

2.5.2 Liaison Officer

Pat Seppi from EPA PAD has been assiting with community outreach. Meetings have been held with the Princeton University Community and the Town officials to discuss the site activities including EPA's air monitoring.

2.5.3 Information Officer

3. Participating Entities

3.1 Unified Command

3.2 Cooperating Agencies

NJDEP continues to be involved in several on site decisions and has visited the Site on several occasions as needed to facilitate the decision process.

4. Personnel On Site

EPA - 2 OSCs - Cris D'Onofrio and Dave Rosoff

ERRS (ER) - 7 employees (RM, FCA, 3 operators and 2 Techs)

RST (Weston) - 1 employee full time; additional as needed - Air monitoring/sampling, survey and photo documentation

5. Definition of Terms

No information available at this time.

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.